Amendments to the Claims

1. (currently amended): A method of controlling transmissions by a group of wireless transceivers, comprising:

transmitting to each of said group a status reporting command; and

receiving status reports from said group of transceivers ~~in an access channel shared with other transceivers in~~ in contention slots shared among said group at intervals determined according to said status reporting command.

2. (canceled)

3. (previously presented): A method as claimed in claim 1, wherein the capacity of said channel is shared between said status reports and data transmitted by one or more of said group according to a channel allocation scheme transmitted to said transceivers.

4. (previously presented): A method as claimed in claim 1, wherein the intervals indicated by said status reporting commands are determined according to the demand by the transceivers for capacity in said channel.

5. (previously presented): A method as claimed in claim 1, wherein said status reports indicate a quantity of data awaiting transmission by the respective transceivers.

6. (currently amended): A method of transmission by a wireless transceiver, comprising:

receiving a status reporting command; and

transmitting status reports in ~~an access channel~~ contention slots shared with other transceivers at intervals determined according to said status reporting command.

7. (canceled)

8. (previously presented): A method as claimed in claim 6, further comprising receiving a channel allocation signal indicating the allocation of a portion of said channel allocated to said transceiver, and transmitting communications data in said allocated portion of said channel.

9. (previously presented): A method as claimed in claim 6, wherein the status reports indicate a quantity of data awaiting transmission at the transceiver.

10. (currently amended) A method of transmission by a wireless transceiver, comprising:

transmitting a status report in ~~an access channel~~ contention slots shared with other transceivers indicating an amount of data awaiting transmission by said transceiver and the required transmission time of at least some of said data.

11. (original): A method as claimed in claim 10, wherein said status report relates to transmission in a specified channel.

12. (previously presented): A method as claimed in claim 10, wherein said status report includes:

a length field indicating the amount of data awaiting transmission;

a start time field indicating the required transmission time of a first portion of said data awaiting transmission; and

an end time field indicating the required transmission time of a last portion of said data awaiting transmission.

13. (withdrawn): A method of transmission in a contention-based access channel by a wireless transceiver, comprising:

a) transmitting a burst in said channel;

b) detecting whether said burst has collided with another burst in said channel;

and, if a collision is detected at said detecting step, waiting for a period determined according to a repeat parameter before repeating steps a) and b), wherein said repeat parameter is received by said transceiver.

14. (withdrawn): A method as claimed in claim 13, wherein said period is randomly or pseudo-randomly selected from a range indicated by said repeat parameter.

15. (withdrawn): A method as claimed in claim 13, wherein said repeat parameter includes a increment by which said range is increased after each repetition of steps a) and b).

16-17. (canceled)

18. (withdrawn) A method as claimed in claim 26, including detecting the content of said monitored data, wherein the demand for capacity is predicted according to said content.

19. (withdrawn) A method of allocating frequency channels to a plurality of wireless transceivers, comprising:

transmitting to each of said transceivers a forward frequency channel allocation signal indicating an allocation of one or more forward frequency channels which that transceiver is to receive; and

transmitting to each of said transceivers, in at least one said forward frequency channels assigned to that transceiver, a respective return channel allocation signal indicating an allocation of one or more return frequency channels in which that transceiver may transmit;

wherein, for each forward frequency channel, a set of preferred return frequency channels is stored, such that for each of said transceivers to which a specified one of said forward frequency channels is allocated, the allocated one or more return frequency channels is preferentially selected from said corresponding set of preferred return frequency channels.

20. (withdrawn) A method of allocating contention-based capacity to a plurality of wireless transceivers, comprising:

transmitting to said transceivers a first contention-based capacity allocation signal indicating a first channel capacity assigned for contention-based access to said transceivers;

receiving in said first channel capacity, transmissions from said transceivers;

detecting a level of usage by said transmissions of said first channel capacity;

determining, according to said level and said first channel capacity, a second channel capacity assigned for contention-based access to said transceivers; and

transmitting a second contention-based capacity allocation signal, indicating said second channel capacity, to said transceivers.

21-25. (canceled)

26. (withdrawn): A method of controlling transmission by a wireless transceiver in a channel shared with transmission by other transceivers, comprising:

monitoring data transmitted to said transceiver;

predicting, on the basis of said monitoring step, a demand for capacity in said channel by said transceiver, and

transmitting to said transceiver an allocation signal indicating an allocation in said channel determined according to said predicted demand.

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27. (withdrawn): A method as claimed in claim 26, including generating a statistical model based on previous traffic flow to and from wireless transceivers, wherein the demand for capacity is predicted according to said statistical model.